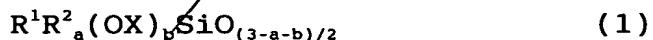


CLAIMS:

5 1. A surface treatment agent which, when applied to a substrate prior to formation of a resist pattern thereon, strengthens adhesion between the substrate and the resist pattern, the surface treatment agent comprising at least one compound of the following compositional formula:



10 wherein  $R^1$  is a  $-(CH_2)_n Y$  moiety in which  $Y$  is epoxycyclohexyl, glycidoxy,  $N$ - $\beta$ -aminoethylamino, amino,  $N$ -phenylamino, mercapto or isocyanate, and  $n$  is an integer from 0 to 4;  $R^2$  is a monovalent hydrocarbon group of 1 to 4 carbons;  $X$  is 15 hydrogen or a monovalent hydrocarbon group of 1 to 4 carbons; "a" is 0 or 1, and "b" is 0, 1 or 2 when "a" is 0, and "b" is 0 or 1 when "a" is 1.

20 2. The surface treatment agent of claim 1, wherein the compound of compositional formula (1) is prepared by hydrolyzing a silane of general formula (2):



25 wherein  $R^1$ ,  $R^2$  and "a" are as defined above;  $Z$  is a monovalent hydrocarbon group of 1 to 4 carbons; and "c" is a number which satisfies the condition  $a+c = 3$ .

30 3. The surface treatment agent of claim 1, wherein  $R^1$  is selected from the group consisting of  $\beta$ -(3,4-epoxy-cyclohexyl)ethyl,  $\gamma$ -aminopropyl,  $\gamma$ -mercaptopropyl,  $\gamma$ -isocyanatepropyl,  $N$ - $\beta$ -(aminoethyl)- $\gamma$ -aminopropyl,  $\gamma$ -glycidoxypipropyl and  $N$ -phenyl- $\gamma$ -aminopropyl.

35 4. A patterning process comprising the steps of applying the surface treatment agent of claim 1 to a substrate and baking, then applying theron a photoresist composition and patterning the photoresist.

5. The patterning process of claim 4, wherein the substrate is a metal or metal oxide substrate.
6. The patterning process of claim 5, wherein the metal or metal oxide making up the substrate is aluminum, iron, nickel, copper, tantalum, gold, or an oxide thereof.

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